

The theory of this treatment is mainly that of shrinkage of the mucous membrane, thus allowing the sinuses to drain more freely. The antiseptic value of the neosilvol is of less importance. It is difficult in some cases to get coöperation from such young patients, but if care is taken not to hurt them the first time they usually submit with ease to subsequent treatments. Between treatments drops of neosilvol and ephedrin are prescribed, to be used two or three times daily. Ephedrin should not be used too freely, as we have had several cases which have developed an idiosyncrasy to it.

If this does not clear up the symptoms an x-ray of the sinuses is taken. If the antra are cloudy the patient is given an anesthetic and the antra washed, using a 2.5-inch needle inserted under the inferior turbinate, always drawing back with a Luer first to make sure the needle is in the antrum. The antrum is filled with normal saline and aspirated, the fluid which returns into the Luer being examined. If it contains pus, mucous shreds or flakes, a window is made under the inferior turbinate as follows: first push up the inferior turbinate, next enter the antrum with a punch; withdraw the punch and insert an antrum rasp and rasp out the thick anterior angle. Next take a heavy punch forceps and punch out as far back as possible, making a large opening. No drain or pack is used. In some cases it is possible to wash the antra with a blunt trocar several days later, but this is often impossible unless one wants to give the patient a little gas. Following this the patient is given a series of tampon treatments and the condition usually clears up.

If the symptoms do not clear up following the above treatment it may be necessary to send the patient to a warm, dry climate, such as Needles, California, or the Santa Clara Valley. Sun baths are often very effective, starting out with an exposure of a few minutes and working up to about an hour a day. This acts as a very good tonic and increases resistance to infection. Treatments with a quartz lamp act in a similar way. Whenever it is possible a pediatrician should handle the medical care, the most important part of this being the diet. We find that a diet containing high vitamin content with food such as eggs, orange juice, carrots, and leafy vegetables is an aid to recovery. Cod-liver oil in some form is also very effective. It is not necessary in all cases to carry out all the treatment mentioned above before getting good results, but in some cases even the most radical procedure will not give complete relief of symptoms.

We are not presenting any case histories, but have mentioned the commonest and most interesting symptoms which have presented themselves, and as a whole these symptoms have cleared up under the above treatment. We have had only about fifty cases, and hence consider this only a preliminary report, hoping that we may be able to produce a more extensive and thorough article at a later date.

#### SUMMARY

1. *Symptoms*.—Nasal discharge; cough; frequent colds; undernourishment; "growing pains";

headaches; impaired hearing; blinking of eyes; bad breath; symptoms of asthma and bronchitis; fever of unknown origin.

2. *Examination of Patient*.—Pus in nose; infected tonsils or of tonsillar remnant; hypertrophied adenoid; lateral pharyngitis; postcervical adenopathy.

3. *X-ray findings*.

4. *Treatment*.—Adenotonsillectomy or removal of adenoid and tonsil remnant; nasal tampons with drops in nose; washing of antra and opening if necessary; dry, warm climate; sun baths or quartz lamp treatment; diet and cod-liver oil.

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## EROSIO INTERDIGITALIS BLASTOMYCETICA\*

### CASE REPORT

By GEORGE F. KOETTER, M. D.  
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IN May, 1917, Fabry<sup>1</sup> reported a series of yeast infections of the hands to which he gave the name *erosio interdigitalis blastomycetica*. In 1918 Berendsen<sup>2</sup> published a paper on the same subject. In 1918 Fabry<sup>3</sup> published another paper. In April, 1921, Stickel<sup>4</sup> reported a series of forty-five cases, thirty-eight of which occurred in women. In March, 1922, Greenbaum and Klaunder<sup>5</sup> published a thorough paper on yeast infections of the skin. Mitchell<sup>6</sup> in December, 1922, published a series of three cases.

*Erosio interdigitalis* or *saccharomycetica* are offered as substitutes for the term *erosio interdigitalis blastomycetica*, which is confusing. The causative organism is not the *blastomycetes*.

I do not think that race has anything to do with this condition except as far as the use of soap and water is concerned, although eleven of twelve cases occurred in Jewish women. I have never encountered this condition in orthodox Jewish women who use washing powders.

My series consists of twelve cases: two of these patients failed to report for observation subsequent to the final scrapings, which were negative for yeast organisms.

### CASE REPORT

Mrs. B., age fifty-four, occupation dishwasher, presented a lesion limited to the web of the third interspace of the right hand. The lesion first appeared about eight months ago and remained constantly in the same area, and showed no tendency to spread to the palmar or dorsal surfaces. Itching and burning was intensified by having the hands in soapy water. During a vacation of two weeks a slight remission occurred.

*Examination*.—The web of the third interspace showed a sharply defined, shiny, red epidermis surrounded by a collarette of upturned scales. Vesicle formation and fissures were absent. Scattered over the red epidermis were small areas of thin, white macerated epidermis which could be removed only with a great deal of difficulty and discomfort to the patient.

Thorough examination of the feet showed no mycotic infection.

*Microscopic*.—Small pieces of thin, white, macerated epidermis soaked in 40 per cent KOH, disclosed numerous double contoured spores which were budding, and solid mycelial threads. Tissue planted in

\* Read before the Dermatology and Syphilology Section, California Medical Association, at its Fifty-Seventh Annual Session, April 30 to May 3, 1928.

Sabouraud's media gave rise to shiny, cream colonies of almost pure culture of yeast organisms. Some secondary contamination was encountered, but on exposing the initial culture to a saturated solution of chlorotone and again transplanting to Sabouraud's media, I obtained a pure culture.

The colonies appeared about three days after implantation of tissue. Microscopically the growth disclosed numerous budding, double-contoured organisms, but no mycelial threads were demonstrable. The growth reached its maximum peripheral extension in about one month.

Thanks are due to Miss Ethel Mahoney for her cooperation in the laboratory examinations.

**Experimental.**—A medical student volunteered for experimental inoculation, and a typical growth in the web of the third interspace was obtained in ten days. No further experimental work has been done up to the time of this paper.

#### TREATMENT

From previous experience this intractable disorder is known to resist antiparasitic measures such as Whitfield's ointment, chrysarobin and a combination of salicylic acid and ammoniated mercury. Repeated exposures of unfiltered x-ray and Kromeyer light to the point of tolerance produced no appreciable effect.

The patients were instructed to keep their hands out of soapy water as much as possible. By the application of one to two per cent aqueous solution of copper sulphate in the form of wet dressings three times daily, for ten minutes, complete cure was obtained in a period of eight to ten days. Repeated scrapings and cultures after clinical cure were negative for yeast organisms.

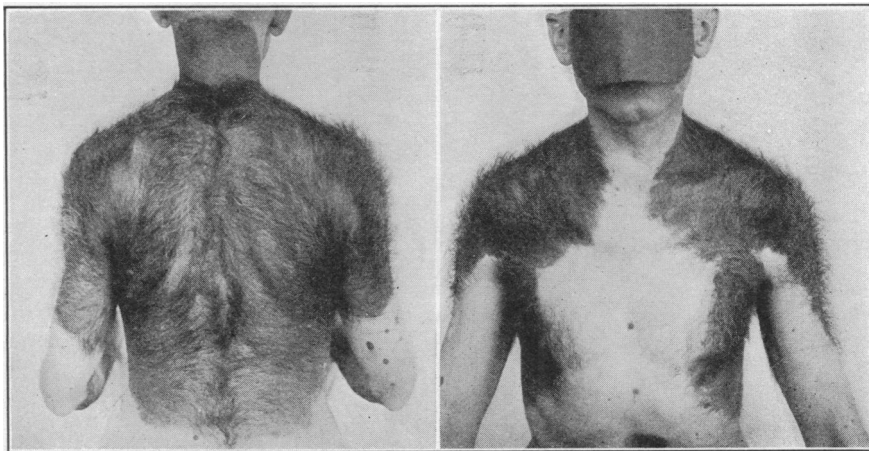
#### SUMMARY

1. In a series of twelve cases of *erosio interdigitalis blastomycetica* clinical and microscopical cures were obtained.
2. The duration of the disease in this series varied from two months to one and one-half years.
3. Soapy water is an important factor in the production and continuance of this disorder.
4. The absence of vesication, chronicity, fixed location, and the occurrence of the disorder on the hands of washerwomen, make the dermatosis worthy of consideration as an entity.

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Pigmented nevus.

### A MEDICAL CURIOSITY

#### PIGMENTED NEVUS—WITH CASE REPORT

By M. S. KING, M. D.

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LAST November (1927) a patient came into the Loma Linda Sanitarium complaining of certain symptoms which are not of sufficient interest to be mentioned in this article, but he did present a physical defect which was indeed a very striking phenomenon, and which, to say the least, was a medical curiosity.

The point of interest was a peculiar congenital skin anomaly on his body. The most striking feature of this skin growth was its peculiar distribution, and the ideas that the patient himself had as to the cause of his trouble. The skin over the affected area was very dark and roughened in appearance and slightly elevated above the surrounding areas, and covered with a dense heavy growth of black hair, giving him a distinctly animal-like appearance.

The growth covered almost the entire upper surface of the back and the shoulders, extending about halfway up on the back of the neck and about halfway round toward the midline of the chest in front. It was very symmetrical in appearance and had a peculiar cut-away effect in front, resembling in appearance some sort of jacket or vest. It also extended a few inches down on the arms, giving it the appearance of short sleeves. The patient stated that he never perspired over this area. There were many smaller patches of a similar nature over the rest of the body and extremities. It was a source of great embarrassment to him, and had been more so in his adolescent years, as swimming and other similar activities so dear to the boyish heart were taboo for him. One of the smaller patches was removed and examined microscopically, and the following report given: "Sections show irregularity of the epidermis, and pigmentation of the deeper layers. In the corium are rather diffuse collections and small dark-staining cells, probably nevus cells. No evidence of malignancy. Diagnosis: pigmented nevus."

The patient was a firm believer in the popular idea of prenatal marking of the fetus. He stated that while he was a child (*in utero*) that his mother had wanted a sealskin jacket, which was the latest thing in fashion at that time, and was saving up money to buy one. Someone broke into the house and stole the money she had hoarded, and she was unable to get the jacket. This was a source of keen disappointment to her, and both she and her son believe it to be the cause of this peculiar birthmarking.

Loma Linda Sanitarium.